AMENDMENT(S) TO THE SPECIFICATION

Please add a paragraph beginning at page 1, line 2:

CROSS REFERENCE TO RELATED APPLICATION

The present application is a 35 U.S.C. §§ 371 national phase conversion of PCT/SE2005/000290, filed 1 March 2005, which claims priority of Swedish Application No. 0400744-9, filed 23 March 2004. The PCT International Application was published in the English language.

Please replace the paragraph beginning at page 1, line 12, with the following rewritten paragraph:

An automatic gearbox for a vehicle is typically controlled by an ECU (electronic control unit), which controls gear selection so as to achieve an engine operation considered appropriate. A number of parameters may be considered when determining an initiation of gear change. Such parameters suitably ~~comprises~~ comprise the vehicle speed, which is calculated as a function of e.g. the speed of a propeller shaft for the driven wheels. A method and apparatus for automatically controlling gear selection, wherein the speed of the propeller shaft is measured, is described in U.S. Patent No. 6,480,776 ~~US-6480776-B1~~. An alternative known in the art for calculating the vehicle speed for determination of a gear change ~~utilises~~ utilizes a sensed value of the engine speed or the crankshaft speed in combination with a current gear ratio between the speed of a gearbox input shaft and a gearbox output shaft/propeller shaft. Another alternative would be to ~~utilise~~ utilize the rate of rotation of the wheels, which may be retrieved from wheel speed sensors adjacent to the each one of the ~~wheel~~ wheels, respectively. However, processed signals from such wheel-speed sensors are generally inferior to the quality provided by a speed sensor for e.g. the propeller shaft and are therefore not used when calculating the vehicle speed.

Please replace the paragraph beginning at page 10, line 1, with the following rewritten paragraph:

In step S4 the computer program for vehicle speed calculation 23 causes the gearbox ECU 12 to first calculate a mean value of the rate of rotation for the non-driven wheels 10 and then calculate a vehicle speed based on the mean value, e.g by multiplying the mean value by a known or estimated value of the radius of one of the non-driven wheels. The calculated vehicle speed of step S4 is subsequently used as an input parameter in the calculation of step S5. In another embodiment of step S4, the rate of rotation for one of the non-driven wheels is used for calculating the vehicle speed. In yet an alternative embodiment of step S4, where a value of the vehicle speed ~~ha~~ has been received from the GPS signal receiving and processing unit in addition to or instead of the value of the rate of rotation for the non-driven wheels, this GPS based vehicle speed is used as an input parameter in the calculation of step S5. In still another alternative embodiment of step S4, a mean value of the GPS based vehicle speed and the vehicle speed based on the mean value of the rate of rotation for the non-driven wheels 10 is calculated and is used as an input parameter in the calculation of step S5. A further alternative embodiment of step S4, comprises the step of choosing the GPS based vehicle speed, if available. Otherwise the vehicle speed based on the rate of rotation of the non-driven wheels 10 is used. GPS signals from satellites and/or base stations may be unavailable e.g. in cases when the vehicle 1 moves through underground or underwater tunnels, i.e. shadow areas, or among tall buildings causing disturbing reflections. In yet an alternative embodiment of step S4, where a value of the vehicle speed has been received from the vehicle radar system 18, that value is used, either directly as an input parameter in the calculation of step S5, or as one of the values when calculating a mean value based also on the GPS based vehicle speed and/or the vehicle speed based on the rate of rotation of the non-driven wheels 10.